

623

DOES EARLY SPONTANEOUS CLOSURE OF THE DUCTUS ARTERIOSUS IN VERY PRETERM INFANTS PREDICT FINAL CLOSURE?

M.M.C. Molenschot¹, P.M.A. Lemmers²,
J.L.M. Strengers¹, F.J. Meijboom¹, F. van Bel²,
W.B. de Vries²

¹*Pediatric Cardiology, ²Neonatology, Wilhelmina Children's Hospital/University Medical Center Utrecht, Utrecht, The Netherlands*

Background: A patent ductus arteriosus (PDA) is a common problem in very premature infants. Echocardiography is the gold standard for diagnosis, although there is no agreement about a most discriminating parameter. Not much is known about the spontaneous closure of the duct. Reports concerning this issue differ widely.

We investigated closure rate of PDA on day 2 after birth in premature infants with a gestational age ≤ 32 weeks.

Methods: During a prospective cohort study on diagnosis of hemodynamic significant PDA we performed echocardiography at 3 standard time points (day 2, 4 and 6 after birth) in 200 premature infants (GA ≤ 32 weeks).

Results: In 70 patients (35%) the duct was closed on day 2 after birth. Gestational age and birth weight of this group was not different from the group (n=130 (65%)) in which the duct was still open. None of the the closed ducts on day 2 after birth reopened at a later point of time.

Of the 130 patients with an open ductus arteriosus on day 2, 33 (16.5% of the total group) needed treatment.

Conclusions: When the ductus arteriosus was closed on day 2 treatment for closure was never needed.

We recommend to perform echocardiography on day 2 after birth in every very premature infant, to make a risk assessment for further clinical course.

624

NEONATAL CONGENITAL HEART DEFECTS: CLINICAL STATUS FROM BIRTH TO ARRIVAL AT THE IRISH NATIONAL CARDIAC CENTRE

S. Smith¹, L. Ng¹, A. Getty¹, M. Lavelle¹,
E. Molloy², O. Franklin¹

¹*Cardiology, ²Neonatology, Our Lady's Hospital for Sick Children, Dublin, Ireland*

Aims: To evaluate immediate postnatal care of infants with congenital heart disease including postnatal care and transfer to the cardiac unit, and identify areas of weakness in service provision.

Methods: All infants less than 6 weeks of age admitted to the national paediatric cardiology centre were included. Preadmission and admission data were recorded as well as results of subsequent investigations. Preterm infants transferred for closure of patent ductus arteriosus were excluded.

Results: The majority of patients were admitted outside of routine hours. Most infants on prostaglandin were on low dose prostaglandin. In non-intubated infants on prostaglandin 8 had minor apnoea. No infants on prostaglandin required intubation due to apnoea during transfer (Table 1)

Total number of infants	206
Infants admitted in working hours	45
Transfer by Neonatal transport team	54
Transfer by Medics of peripheral unit	75
On Prostaglandin (PGE2)	75
Electively Ventilated on PGE2	20
Unventilated with apnoea on PGE2	8
Requiring intubation during transfer on PGE2	0

[Table 1 Characteristics of infants admitted]

Conclusions: The neonatal transport team operates during business hours and therefore service extension is necessary to meet the population's needs. No infants were intubated during transfer on low dose prostaglandin. This supports a local policy of not electively intubating all neonates with cardiac disease who require prostaglandin to maintain ductal patency.